FOREIGN AGRICULTURE

arvesting palm fruits, Malaysia

February 7, 1977

- Malaysia's Palm Oil Industry Still Growing

Foreign Agricultural Service
U. S. DEPARTMENT OF AGRICULTURE

FOREIGN AGRICULTURE

Vol. XV • No. 6 • February 7, 1977

In this issue:

2 Malaysia Still Foremost Palm Oil Producer/Exporter By Kevin J. Lanagan

4 Felda Helps Malaysia's Farmers Share in Palm Boom By Kevin J. Lanagan

5 Recovery in World Fish Oils Seen Following 1976 Slump

6 World Food Prices

7 Ecuador Buys More U.S. Parent-Stock Breeding Chicks

8 U.S. Cotton Export Outlook Good, as World Supply Tightens By Joseph H. Stevenson

10 Iranian Poultry Imports Rise as Demand Exceeds Supply

OECD Views on World Food Trends

This week's cover:

Harvesting palm fruits on a private estate in Malaysia. Malaysia's share of world palm oil production and exports rose again in 1976. However, the Government continues to search for profitable alternative crops to oil palm, despite its increased export earnings, according to article opposite.

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The Secretary of Agriculture has determined that publication of this periodical is necessary in the transaction of public business required by law of this Department. Use of funds for printing *Foreign Agriculture* has been approved by the Director, Office of Management and Budget through June 30, 1979. Yearly subscription rate: $34.35 domestic, $42.95 foreign; single copies 70 cents. Order from Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. Contents of this magazine may be reprinted freely. Use of commercial and trade names does not imply approval or constitute endorsement by USDA or Foreign Agricultural Service.

Malaysia Still Foremost Palm Oil Producer/Exporter

By KEVIN J. LANAGAN
Foreign Commodity Analysis, Oilseeds and Products
Foreign Agricultural Service

MALAYSIA'S SHARE of world palm oil production and exports increased again in 1976, reaffirming Malaysia's position in the forefront of world palm oil trade.

Plant maturation, technological improvements, replacement of rubber area by oil palm, and establishment of grading standards will steadily improve both the amount and marketability of palm oil to the point that Malaysia's share of world production and exports will likely be 57 percent and 78 percent, respectively, by 1980.

Malaysia produced an estimated 1.40 million metric tons of palm oil in 1976 —44 percent of the world production estimate of 3.2 million tons. Exports also rose to 1.41 million (including stocks from 1975) or approximately 70 percent of world exports of palm oil in 1976.

Anticipation of a new export tax policy on refined palm oil—announced by the Government of Malaysia in July 1976—may have prompted heavy forward sales of refined oil during the January-June period of 1976. Prior to July, refined palm oil was exported duty-free from Malaysia. A a result, Malaysia boosted its refined oil exports to an estimated 350,000 tons—up 72 percent from 204,000 tons in 1975.

Contributing to Malaysia's promising palm oil future are increased plant yields. Yields of fresh fruit bunches rise as individual trees mature. Since the largest portion of existing oil palm area in West Malaysia was planted between 1970 and 1975 and has yet to reach peak production, overall yield per hectare in peninsular Malaysia will advance as this largest group of trees attains maximum productivity.

In addition, plant breeders have developed a variety of oil palm whose

fruit has a smaller, thinner shelled kernel, yielding a larger oil-bearing portion of fruit. Scientists are also perfecting a vegetative breeding method, which could raise yields even further. By the early 1980's, new breeding methods may improve yields by as much as 30 percent over present levels.

The industry has also developed crushing mills that easily allow for increased production demands and make more efficient use of fruit refuse.

A new Malaysian palm oil refinery was scheduled to open in November 1976. The new facility will process a complete line of products and will have a monthly capacity of 7,000 tons (crude basis).

Also contributing to Malaysia's oil palm development scheme is the Government's pledge to support establishment of a licensing agency to certify a Standard Malaysian Palm Oil grade for exports. This certification, when enacted, will amount to an official guarantee of consistency in palm oil quality and composition, improving the marketability of Malaysia's palm oil.

Malaysia has clearly committed itself to further expansion of the oil palm industry. This trend began in the 1960's, when, alarmed by falling rubber prices, Malaysia embarked on a program of agricultural diversification to ease dependence on rubber sales for export earnings.

During 1961-71, roughly 50-60 percent of new oil palm plantings replaced rubber stands. New smallholder rubber plantings during this time were nearly balanced by substitution of old rubber trees by oil palm. As a result, Malaysian export earnings for rubber dropped from 45 percent to 29 percent in share of total export earnings, while palm oil export earnings rose from insignificant levels to 8 percent of the total. In 1976, palm oil's share of export earnings is estimated to have reached 10 percent, while rubber's share will likely drop to 20 percent.

Although rubber is still Malaysia's top export earner, its share of total export earnings has been steadily decreasing. There is some speculation that high petroleum costs leading to higher synthetic rubber prices may revitalize the market position of natural rubber.

However, given the continued possibility of weakened rubber prices in the future and past experience with falling rubber prices in the 1960's, Malaysia probably will not reverse its gradual trend—already established—away from rubber toward oil palm.

In terms of financial returns, oil palm is more profitable than rubber at present. Furthermore, a significant number of rubber trees will reach replacement age by 1980, while the oldest oil palms will not need to be replaced until 1985. These factors should encourage further substitutions of oil palm for rubber during the next 4 years in West Malaysia.

As a result of Malaysia's experience with depressed rubber prices in the 1960's, the Government has continued to search for profitable alternative crops to oil palm, despite its increased export earnings. A wide assortment of tropical crops grow well in peninsular Malaysia, but only a few could be produced on a scale extensive enough to supplement foreign exchange earnings of palm oil should world prices decline.

Cocoa in West Malaysia apparently earns more per hectare than either oil palm or rubber, and, as an export crop, currently enjoys a healthy world market. Cocoa area has grown from 2,000 hectares in 1970 to 24,000 hectares in 1976, and plantation owners recently have experimented with intercropping of coconut and cocoa. Cocoa profitability will probably generate modest replacement of aged or damaged oil palms and rubber trees with cocoa trees during 1976-80 in West Malaysia.

Tea is another alternative crop that has been studied. However, large-scale development of tea plantations has been hampered by limited highland area suitable for production. The lack of suitable area has also discouraged large volume production of sugarcane.

Fluctuations in world coffee prices preclude Malaysian dependence on coffee export earnings as a major supplement for palm oil. Coffee area can be expected to expand somewhat in the next decade, however, as earnings supplement minor exports crops such as tea, pepper, and coconut.

COCONUT trees flourish and intercrop well with cocoa along coastal areas, but major expansion into coconut would place Malaysia in direct competition with the Philippines, which accounts for 50 percent of world production and 75 percent of world exports of copra and coconut oil. Since 1960, coconut area in Malaysia has remained within the range of 210,000-220,000 hectares. Area planted to coconut may enjoy a modest gain to 235,000 hectares by 1980, stimulated by intercropping with cocoa.

The Government of Malaysia has also established a high support price to stimulate rice production. As a result, rice area has roughly doubled in Malaysia since 1960 and the country is nearly 80 percent self-sufficient in rice production. However, rice is also imported from neighboring Thailand, which enjoys an absolute cost advantage over Malaysia in rice production.

Futhermore, Thailand's rice export tax—the so-called rice premium—maintains a wedge between domestic and world rice prices, precipitating rice smuggling into Malaysia. These factors discourage significant investment in rice as a major export crop or alternative to oil palm.

The force behind Malaysia's burgeoning palm oil industry and other crop development has been the Federal Land Development Authority (FELDA). Since 1956, FELDA has established nearly 365,000 hectares of oil palm and rubber in West Malaysia.

FELDA will account for nearly all oil palm area expansion in West Malaysia during 1976-80, and will be a key factor in future growth of Malaysia's palm oil industry.

FELDA Helps Malaysia's Farmers Share in Palm Boom

By KEVIN J. LANAGAN
Foreign Commodity Analysis, Oilseeds and Products
Foreign Agricultural Service

MALAYSIA'S FEDERAL Land Development Authority (FELDA) is responsible for much of the country's economic development, particularly its thriving production and exports of palm oil.

Established in 1956, and funded primarily through Government grants and loans, FELDA initiates, funds, and supervises land development for expanding production of primary Malaysian export crops such as oil palm and rubber, while utilizing labor resources from the rural population.

Since its inception, FELDA has developed roughly 365,000 hectares of land in West Malaysia, primarily for oil palm and rubber. FELDA now manages nearly 40 percent of the total oil palm area in West Malaysia, the world's largest producer and exporter of palm oil.

During Malaysia's Third Plan (1976-80), FELDA will develop 114,000 additional hectares of oil palm, continuing its key role in the Malaysian palm oil industry, whose export earnings have soared from US$48 million in 1966 to an estimated $500 million in 1976.

Developed land in Malaysia becomes a FELDA project, or scheme, on which families settle to produce cash crops, paying FELDA in monthly installments for establishment expenses of the land they tend. Comprehensive FELDA services include land clearing, selecting and placement of settlers, development of settler villages within individual schemes, planting main crops, providing settlers with credit and marketing services, and supervising farming procedures.

Prospective settlers first submit applications to FELDA for consideration as a scheme family. Those who are approved are placed on a waiting list until positions in individual schemes become available. Appointed families are then transported free of charge from their former homes to FELDA sites. Since it was established, FELDA has settled 36,000 families and intends to settle 20,000 more during the Third Malaysian Plan.

Each scheme surrounds a village center which provides health clinics, recreational facilities, stores, and schools.

Settlers draw lots for assignment to particular schemes and villages. Most schemes adopt a block system, under which a squad of 20 smallholders works roughly 80 hectares. With credit assistance from FELDA management, each block plans cooperative action for normal land maintenance.

A FELDA smallholder scheme develops through four stages:

Development. FELDA undertakes land clearing and scheme establishment. This includes clearing the jungle, constructing housing and community facilities, building roads and water supplies, and initiating management and care of each agricultural holding. This last step, which accounts for over half of settlement costs, includes planting and cultivating the main crop and providing initial application of manure and irrigation. Costs for this stage, per settler, are estimated at US$11,600.

Maintenance. Two to 3 years after completion of land clearing, settlers enter schemes. Training from the FELDA staff enables settlers to assume

Continued on page 12

Near right: Workers deliver fertilizer for later application to oil palm plants. Fruit bunches at base of tree are stacked near road for eventual pickup. Herbicides are used to clear 10-foot circles at the base of each tree to facilitate retrieval of loose fruitlets separated from harvested bunches. Far right: Harvester carries basket of loose palm fruits to roadside. Fruit bunches and fruitlets are purchased and processed by FELDA palm oil mills.

Recovery in World Fish Oils Seen Following 1976 Slump

FOLLOWING a slump in 1976, world production and exports of fish oil are expected to gain slightly in 1977. Peru, traditionally a leading fish oil producer-exporter, will account for virtually all the increase as it recovers from a 1976 output that was only about one-third that of 1975.

The projection for the world fish oil production in 1977 is 930,000 metric tons—only 50,000 tons above the estimate for 1976. Output in 1976 sagged about 9 percent from the 972,000 tons produced in 1975.

World net exports of fish oil in 1977 are forecast at about 500,000 tons. This is a 35,000-ton upturn from 1976's volume—the smallest since 1964—but, still 45,000 tons shy of 1975's total of 545,000 tons. The 1976 dropoff of about 80,000 tons to a total of 465,000 tons reflected increased domestic needs in producer countries, and depleted stocks in Peru.

If oil yields improve as expected and a larger catch is achieved, Peru's 1977 output of fish oil is seen gaining by about one-half from the 1976 volume of 101,000 tons. However, a substantial portion of Peru's production probably will not be realized until the last quarter of 1977. In 1976, Peru's fish oil production plunged 52 percent from 1975's output of 211,000 tons, a decline of 110,000 tons.

Peru's anchovy catch in 1976 was estimated at 3.9 million tons, about a 33 percent upturn compared with the 1975 catch of about 3 million tons.

Also, Peru's exports of fish oil are expected to recover in 1977, jumping to 60,000 tons from an estimated 20,000 tons in 1976—a year that witnessed a steep decline following Peru's heavy export volume of 129,000 tons in 1975.

The Peruvian production collapse in 1976 is attributed to three main factors: (1) reduced anchovy oil yield, the lowest since 1973, that averaged only 2.6 percent, far below the 6.9 percent recorded in 1975; (2) above normal water temperatures which affected fishing conditions in the northern sectors; and (3) a prolonged labor dispute between the fishermen and the Government, which limited the number of boats used for fishing. The catch was 13 percent below the targeted level.

Norway's fish oil production in 1976 rose, as a result of a gain in its catch, to an estimated 185,000 tons. The U.S. output is estimated to have dipped about 6,000 tons to a total of 105,000, while production in Japan and Denmark may have reached the 1975 levels of 136,000 and 93,000 tons, respectively.

Among the leading producer-exporters in 1977, Norway is expected to produce 190,000 tons, a gain of about 5,000 tons from the previous year. Projections for Japan and Denmark stand at 130,000 and 90,000 tons, respectively, or about the same levels estimated for 1976. Their fish oil exports in 1977 are forecast as follows: Norway, 165,000 tons; Denmark, 60,000; and Japan, 50000. This would amount to only a 5,000-ton increase for Norway, and about 5,000-ton decrease for Denmark and Japan.

Excluding Norway and Peru, the 1976 world fish oil exports are estimated to be about 285,000 tons—18,000 tons above the 1975 trade—indicating some drawdown in stocks, because the output of these major producer countries is pegged at 595,000 tons or approximately the same level as in 1975.

In 1977, U.S. fish oil production is forecast to decline about 5,000 tons to 100,000 tons—following a 6,000-ton drop in 1976. Still, the United States is expected to rank, for the second straight year, as the second leading exporter (behind Norway) of fish oil. These 1977 U.S. fish oil exports are projected to remain close to the 1976 volume of 85,000 tons, and they will go mainly to the United Kingdom, West Germany, Sweden, and the Netherlands.

During 1975, the United Kingdom continued to be the world's largest importer of fish oil with net imports totaling 175,000 tons. The next largest net importer was West Germany, which bought about 135,000 tons.

The world's leading fish oil exporters in 1975 were: Norway, 149,000 tons; Peru, 129,000 tons; the United States, 81,000 tons; Denmark, 61,000 tons; Japan, 54,000 tons; and Iceland, 26,000 tons.

(Top to bottom) Peru: neatly stacked rows of fish nets; fishing fleet gathering off the coast; and piles of fishmeat stored in open areas.

World Retail Food Prices Higher in January

SUBSTANTIAL increases over November levels were noted in retail food prices shopped on January 5 by U.S. Agricultural Attachés in 15 world capitals. Buenos Aires experienced more individual price rises than any other capital in the FAS survey.

Although Buenos Aires quoted prices for only 18 of the 21 items listed in the FAS survey, 17 of these reported items were higher by anywhere from 3 percent to 111 percent in January than in the previous bimonthly FAS survey. The price of one item shopped in Buenos Aires — white potatoes — dropped in price by 21 percent.

Prices in The Hague are somewhat out of line with prices in other parts of the world, registering only slight gains in three of the items covered.

In Brasília, fresh meat is once again available—at higher prices—in retail food stores.

In Brussels, beef prices remain at the same relatively high levels reported in November, with a slight decline for the better cuts offset by higher prices for other cuts. Overproduction and sluggish demand have caused pork chop and pork roast prices in Brussels to drop by 6-7.5 percent. Current retail prices for this item are the lowest since May 1975.

The significant rise in Tokyo's beef prices is attributable to the large reduction in the beef import quota.

London has experienced a slight easing—believed to be seasonal—in red meat prices as shoppers found their disposable funds reduced following the holidays.

Beef prices in The Hague are steady, but pork prices there have weakened further as a result of continued heavy supplies.

Despite the high volume of export contracts in The Hague for supplying broiler meat to the Soviet Union, these shipments have cleared only a part of the stocks. The general oversupply situation continues, and prices remain depressed.

Retail broiler and egg prices in Brussels were reported up 7.5 percent and 10.5 percent, respectively, reflecting heavy holiday demand. However, prices for these items are expected to decline significantly in the near future.

Ottawa's egg prices dropped slightly from those reported in the November survey. Feed costs have declined, prompting the Canadian Egg Marketing Agency to lower prices paid egg producers.

In Rome, egg prices were 25 percent higher in January than in November. Egg prices in West European capitals were generally higher than in November.

The Swedish Government has ended the price freeze on certain food items (including canned meat and vegetables, some frozen foods, and jams) that formed the base of an enlarged price freeze that went into effect March 3, 1976.

FOOD PRICE INDEX CHANGES IN SELECTED COUNTRIES[1]

Country	Latest month	Index 1970=100	Percent change from Prev. month	Three months	One year
Argentina	Nov.	9,412.7	+ 10.2	+ 30.4	+ 380.2
Australia	Sept.	180.7	+ 1.7	+ 4.2	+ 12.7
Belgium	Nov.	166.5	+ .8	+ 3.8	+ 10.9
Brazil	Nov.	450.7	+ 1.7	+ 7.9	+ 44.9
Canada	Nov.	167.2	— .2	— .9	— 1.8
Denmark	Nov.	190.8	+ 1.0	+ 5.4	+ 15.8
France	Nov.	183.1	+ .9	+ 4.0	+ 11.0
Germany	Nov.	136.9	+ .5	— .4	+ 4.6
Italy	Nov.	217.2	+ 1.8	+ 7.1	+ 21.5
Japan	Nov.	198.4	— 1.5	+ 2.6	+ 6.9
Mexico	Nov.	228.0	+ 2.6	+ 12.3	+ 19.4
Netherlands	Nov.	158.6	.0	+ 2.3	+ 10.2
Sweden	Nov.	173.9	+ 1.0	+ .6	+ 10.8
United Kingdom	Nov.	266.9	+ 2.0	+ 8.9	+ 21.9
United States	Nov.	157.6	— .3	— .7	+ .7

[1] Based on official price indexes.

FAS SURVEY OF RETAIL FOOD PRICES IN SELECTED WORLD CAPITALS, JANUARY 5, 19
[U.S. dollars per kg or units as indicated,[1] converted at current exchange rates]

City	Steak, sirloin, boneless	Roast, chuck, boneless	Pork chops	Roast, pork, boneless	Ham, canned	Bacon, sliced, pkgd.	Broilers, whole	Eggs, dozen	Butter	Margarine	Cheese: Edam, Gouda, or Cheddar	Milk, whole, liter	Oil, cooking, liter	Tomatoes	Onions yellow
Bonn	9.57	6.89	5.79	9.87	(2)	7.64	2.14	1.42	3.80	1.63	3.08	0.43	1.67	1.05	0.7
Brasilia	1.71	1.48	2.39	4.90	3.79	5.38	1.16	.72	2.70	1.20	3.15	.21	1.00	.52	.36
Brussels	9.29	4.88	4.04	4.32	6.36	3.46	2.37	1.45	4.02	1.62	4.13	.47	1.34	1.92	.67
Buenos Aires	1.92	1.04	1.52	(2)	(2)	(2)	1.08	.72	1.70	1.02	1.76	.16	1.61	.76	.18
Canberra	3.64	1.78	3.66	3.49	4.34	4.43	2.43	1.02	2.01	1.77	2.48	.39	1.54	3.81	.55
Copenhagen	11.67	5.34	6.18	(2)	7.35	5.81	2.26	1.45	3.79	1.24	3.94	.47	1.81	2.57	1.37
London	6.34	2.79	3.17	2.64	3.40	4.08	1.43	.84	1.96	1.17	2.11	.31	1.18	1.36	.57
Mexico City	2.07	2.01	1.96	2.87	(2)	3.11	1.51	.57	2.75	1.54	5.48	.28	.97	.48	.32
Ottawa	3.91	2.81	3.82	2.72	4.90	3.36	1.69	.92	2.61	1.96	3.93	.52	1.56	1.52	.53
Paris	6.85	3.80	(2)	5.10	5.22	8.09	2.10	1.55	3.56	1.11	3.54	.36	1.13	.87	.80
Rome	7.14	5.72	4.35	4.35	4.96	4.34	2.04	1.26	4.10	1.60	3.41	.39	1.05	1.12	.48
Stockholm	12.18	7.35	5.87	10.70	6.87	6.91	3.48	1.87	3.32	2.38	4.98	.38	4.96	3.21	1.30
The Hague	9.19	5.51	4.49	5.71	5.27	7.31	1.90	1.22	3.42	1.18	4.09	.40	1.10	.96	.51
Tokyo	23.36	14.55	6.16	6.95	10.46	8.33	2.74	.97	4.55	3.08	5.81	.66	1.82	1.98	.56
Washington	4.01	2.69	3.79	3.11	5.00	3.06	1.15	.99	2.91	1.61	4.87	.50	1.83	1.19	.53
Median	6.85	3.80	3.93	4.35	5.11	4.91	2.04	1.02	3.32	1.60	3.93	.39	1.54	1.19	.55

[1] 1 kilogram=2.2046 pounds; 1 liter=1.0567 quarts. [2] Not available. Source: U.S. Agricultural Attachés.

Prices are still frozen on basic foods such as fresh and frozen meat, dairy products and bread. To compensate producers for their higher costs and to keep returns for farm labor and capital in line with nonfarm returns, Sweden's Price and Cartel Office has permitted some consumer price increases, effective January 1.

In London, a standard white, wrapped, sliced loaf of bread now costs the equivalent of 45 U.S. cents, up 4 cents from the price in the previous survey.

—SIDONIA R. DICOSTANZO, FAS

Data Qualifications

Food price indexes, which reflect food price changes in general, are obtained from official government sources. They are based on local-currency prices, and are not directly affected by exchange rate fluctuations.

Food prices of selected commodities are obtained by U.S. Agricultural Attachés on the first Wednesday of every other month. Local currency prices are converted to U.S. prices on the basis of exchange rates on the date of the compilation. Thus, shifts in exchange rates directly affect comparisons between time periods.

The objective of the survey is to reflect the level of prices in other countries of items normally purchased by U.S. consumers. Exact comparisons are not always possible, since quality and availability vary greatly among countries. An attempt is made to maintain consistency in the items and outlets sampled, but they are not necessarily representative of those in the reporting countries.

, 1977

ions, ellow	Potatoes	Apples	Oranges, dozen	Bread, white, pkgd.	Rice	Sugar
.76	0.43	0.63	1.51	0.98	1.40	0.67
.36	.45	1.10	.35	.87	.43	.32
.67	.39	.75	1.28	.78	1.00	.81
.18	.23	.62	.59	.56	.54	.58
.55	.36	.70	.92	.82	.74	.33
.37	.55	1.14	1.43	1.39	1.12	.67
.57	.49	.70	1.75	.45	.75	.43
82	.43	.55	.20	.47	.58	.30
.53	.26	.86	.99	.77	1.16	.44
.80	.44	.55	1.46	1.64	.68	.52
.48	.46	.40	.80	.89	1.16	.62
.30	.50	1.00	1.68	1.96	1.38	.86
.51	.33	.40	.94	.51	.81	.65
.56	.46	1.27	6.42	.94	.94	.82
.53	.31	.86	1.80	1.10	.82	.46
.55	.43	.70	1.28	.87	.82	.58

Ecuador Buys More U.S. Parent-Stock Breeding Chicks

U.S. exports of breeding stock baby chicks to Equador are likely to increase in the next few years as Ecuador's poultry industry continues its expansion of commercial operations.

In the past 10 years, Ecuador's poultry industry has grown substantially, with the laying flock increasing from 5.7 million birds in 1967 to an estimated 7.5 million birds in 1976.

The focus of Ecuador's poultry industry has also undergone change in the past 10 years. In 1967, virtually the only purpose of the industry was the production of eggs; most of the poultry meat was obtained from culled layers.

At about that time, the broiler industry began to expand rapidly from an estimated annual output of less than 1 million birds to a projected 8.5 million in 1976.

The increase in the average number of laying hens has been less dramatic over the same period of time. Most of the growth probably occurred among commercial flocks, as the size of the family flock population has remained relatively unchanged from that of 1967 when it was in the range of 2.0-2.2 million birds.

Although the growth trend in the layer population was upward through 1972, its pattern was irregular, depending on profits. In 1973, the poultry industry began its most rapid period of increase—both for broilers and layers —as revenues from crude oil exports began to be diffused throughout the economy.

By that time, a taste for broiler meat had been established and eggs were being used in a variety of ways. While official information on the poultry industry in Ecuador is very limited, the current annual rate of growth in the laying population is estimated at 20 percent, while that for broilers is roughly 35 percent.

While family flocks are scattered throughout the countryside, nearly all of the commercial broiler operations and half the layer flocks in Ecuador have become centered near the large consumption centers — mainly Quito, Guayaquil, and Cuenca — where demand for eggs and meat is high, and transportation, poultry feedstuffs, and power facilities are readily available.

The balance of layer farms are located on the coast in Manabi Province, the principal hard corn producing area of the country.

In order to accommodate an expansion in the poultry industry, the number of hatcheries increased to about 10 and some existing installations were expanded.

According to estimates, Ecuador can now incubate up to 2.1-2.2 million eggs at any one time.

All of the hatchery operations are oriented toward U.S. breeding stock, which make up 95 to 99 percent of such imports.

According to U.S. export statistics, U.S. shipments of breeding stock baby chicks increased from 43,000 in 1969 to 202,000 in 1975. Other baby chick imports from the United States have increased from 61,000 to 200,000 during this same period. Imports of shell eggs for hatching peaked in 1973 at 304,000 dozen and have since declined to 155,00 dozen.

Within a few months, Ecuador's imports of fertile shell eggs and nonbreeding stock, 1-day old chicks will start to decline as Ecuadorean hatcheries expect to have their own facilities to produce fertile eggs.

The hatching capacity of the country is already adequate to provide the numbers of baby chicks required. At the same time, imports of chicks for parent-stock flocks mainly from the United States should rise in direct relation to the growth of Ecudaor's poultry industry.

Commercial poultry production in Ecuador, however, is still a relatively young industry, with only a few operations of 5,000-bird or larger units. Although future growth is expected to continue to be rapid, growth will be more in terms of flock size rather than in the number of producers.

As this growth occurs, market structure will undoubtedly change. Whether this will involve a proliferation of intermediate marketing steps or a consolidation of the market remains to be seen.

Some change in the Ecuadorean poultry market may become apparent immediately. One of the largest egg producers in the country may soon establish its own retail outlets.

—Based on a dispatch from
C. MILTON ANDERSON
U.S. Agricultural Attaché, Quito

U.S. Cotton Export Outlook Good, as World Stocks Dip

By JOSEPH H. STEVENSON
Foreign Commodity Analysis, Cotton
Foreign Agricultural Service

PROSPECTS are bright for U.S. exports of 4.25-4.75 million bales this marketing year, as a result of a relatively tight supply position abroad. This would be a substantial increase from last season's exports of 3.3 million bales. A key element will be developments in the economies of foreign importing countries, where there are some weak and some strong spots. High cotton prices and larger cotton production abroad in 1977 could cut into U.S. export demand. But on balance, exports should fare well in 1976/77 and perhaps next season also.

Foreign stocks of cotton could be down to less than 18.0 million bales by August 1. This would be almost 2.5 million bales below stocks last August 1, and almost 8.0 million bales below a rather high level 2 years earlier. This would represent less than 4 months' consumption.

An upturn in foreign cotton production can be expected in 1977. Southern Hemisphere cotton area in South Brazil, Argentina, South Africa, and certain other regions is up an estimated 18 percent and production may increase by nearly a million bales, or 26 percent. South Brazil reportedly increased plantings by 40 percent because of attractive cotton prices. This cotton will be harvested this spring.

Plantings in Northern Hemisphere countries, where about 90 percent of the world's cotton is grown, are expected to increase this spring, chiefly because of attractive cotton prices and more plentiful inputs such as fertiliers. These larger crops will come on the market this fall.

Information is currently being gathered and analyzed on prospective plantings abroad in 1977/78. Our preliminary judgment is that there will be an increase of perhaps 4 percent. By comparison, an increase of 6 percent, or 1.6 million hectares, would be necessary to reach the record 28.5 million hectares in 1971/72. Therefore, the increase in foreign production in 1977/78 will likely be moderate in size.

There are limitations on the amount of land and other resources suitable for cotton production. And, even with attractive prices in the spring of 1976, Northern Hemisphere plantings outside the United States did not increase significantly because of sharp declines in India, Turkey, Egypt, and Uganda, where growers were dissatisfied with government price and marketing policies. Although cotton is an attractive earner of foreign exchange, this is counterbalanced to some extent by the fact that some countries are putting added emphasis on food crops to meet increasing needs for food and to cut down on expense of importing foods.

Most foreign textile industries have recovered from their recession lows, although business has slowed in a number of countries since last summer. Cotton is enjoying a revival in popularity with consumers, and the general economic outlook appears good, with some exceptions. These factors point to potential for return to, or acceleration of, the uptrend in cotton consumption evident since World War II.

This season, however, tighter supplies and higher prices of cotton have acted as a damper on this potential. Although generally optimistic about demand, foreign mills have maintained they could not realize enough from prevailing yarn and cloth prices in recent months to buy replacement cotton in the 80-cent-plus range.

The recent pause in economic expansion has also affected buying decisions, and there has been some substitution of polyester, whose price became attractive compared with that of raw cotton. In the face of these factors, the market mechanism has performed classically to dampen demand and reduce cotton consumption somewhat below what would have seemed possible. Consumption could improve as the year progresses if more cotton is produced and if prices are attractive relative to yarn and polyester prices. However, rising wage rates and escalating textile imports could adversely affect cotton offtake in some countries, particularly Western Europe.

Chemical companies in many countries currently are reported to be losing money on their manmade fiber operations and are involved in what one chemical magazine terms "ruinous competition." Prices for polyester staple in Europe and Japan, currently around 58 cents a pound, are actually lower than a few months ago. Producers would like to increase prices, but increases may not be substantial given the state of the market and competition. A rise in the price of oil may not have a substantial effect on price of polyester. For example, $1 more for a barrel of crude oil would raise the cost of intermediate chemicals for mandmade fibers by only about 1 cent per pound. Therefore, the price of polyester is not likely to exceed the price of cotton greatly, as in some past years.

A FACTOR to watch carefully is the general economy and the response of textile production to economic oscillations. The 1977 economic growth rate is likely to be above long-term averages for West Germany, and in Japan only slightly below the 1976 rate of 6.5 percent. In the important markets of Korea and Taiwan, economic growth (including the important element of exports) was quite strong in 1976, and is expected to be moderately lower but still fairly healthy in 1977. No major market is expected to show a decline in the level of gross national product. However, no growth is expected for Italy, and the rate in the United Kingdom will be only 2.0 to 2.5 percent.

Expected to continue upward is the consumption of cotton by many countries that are traditional exporters of raw cotton, but have moved into the spinning business.

Brazil, Turkey, Pakistan, Mexico, Colombia, and other nations have been increasing domestic use of their cotton production and are receiving the value added from exports of yarn, cloth, and finished products. This in turn diminishes the demand for raw cotton in the countries that import these goods, and has wide implications for cotton consumption and trade.

A decline in world trade is anticipated this season (1976/77) in keeping with the supply, demand, and price situation, and the drawdown in stocks by importers. Buying for some time now has been more on a current-need basis. However, later in the calendar year, trade could pick up as larger supplies

become available, if the consumption picture improves and the economic environment encourages some rebuilding of stocks.

There are several important factors of a longer term nature to watch for in assessing U.S. export market opportunities and competition abroad.

The Far Eastern countries are likely to remain the largest export markets for U.S. cotton. Consumption in these countries is growing rapidly, with the important exception of Japan. With less expensive labor, and expanding domestic and export sales, their textile industries should continue to import large quantities of cotton.

The need for cotton by the People's Republic of China should not be overlooked. Traditionally a market for about 600,000 bales annually, China imported as much as 1.8 million bales in 1972/73 and again in 1973/74, including the first imports from the United States in many years. China's expanding trade with Western countries includes sizable textile exports, and China will be able to use larger supplies of cotton in the future. While both political as well as economic considerations will have a bearing on China's imports, the Chinese will probably be most interested in cotton among the commodities the United States has to offer.

The Soviet Union is likely to continue to make moderate increases in its cotton area and production. That country, now the world's largest cotton producer, continues to bring new irrigated land into cotton cultivation each year, to give substantial incentives to a high level of cotton production and to give priority to cotton inputs such as fertilizer and machinery. Also, the Soviet Union, already exporting about 3.5 million bales a year, will continue as an important supplier to socialist countries as well as traditional U.S. markets in Western Europe and Japan. A U.S. cotton team visited the Soviet Union's cotton producing area last fall and will issue a report soon.

Costs of producing cotton, both domestically and abroad, seem almost certain to continue to move upward. This could have many implications for cotton, particularly with respect to competition from alternative crops and manmade fibers.

Another emerging trend abroad is the growth of government intervention in cotton production, marketing, and use in many countries. Therefore, the future trend for cotton could depend in some cases on government decisions—how much will be produced, how and at what price it will be sold or bought, whether to favor domestic use or exports, and whether to encourage use of cotton or other fibers. Also, land reform can have disruptive effects, especially in the shorter term, as large economic holdings are subdivided and capital and production expertise are removed.

Several international programs on cotton are being considered this year. One of these is the proposal by the United Nations Development Program, the World Bank, and the Rockefeller Foundation for an expanded international program of research and development for cotton. The International Institute for Cotton (IIC) has been carrying out promotion and research activities on an international basis aimed at improving cotton's position in its competition with manmade fibers. The new scheme would expand the present activities of IIC to include production research and technical assistance to the textile industries of developing countries. Proposed financing would be from cotton exporting countries, and donations from developed countries and international organizations.

Under another program, the less developed countries are demanding a "new international economic order," which involves far-reaching international policies for commodity production, pricing, and trade. The objectives of the developing countries in proposing a so-called "integrated program for commodities," including cotton, in the United Nations Conference on Trade and Development (UNCTAD) include intergovernmental commodity agreements; a common fund to finance those agreements, with provisions for buffer stocks; index-linking of the prices of LDC's commodity exports to the prices of their imports; compensatory financing to guarantee against short falls in earnings from commodity exports from developing countries; a network of intergovernmental purchase and supply commitments; improved access to advanced country markets; and transfer of primary processing activities from rich to poor countries.

The Multilateral Trade Negotiations (MTN) will proceed in Geneva in 1977. The objectives of the MTN are to improve the conditions of trade and the access to markets in the world. Cotton, fortunately, has fewer trade restraints than some other commodities face in world commerce. Nevertheless, USDA and the cotton industry are advising on trade negotiation matters relating to cotton.

WORLD AND U.S. COTTON OUTLOOK

Highlights of the world cotton situation and outlook for 1976/77—

—Supplies of 83.0 million bales are down 3.5 million from last season's and almost 8.0 million from 2 years ago.

—Production is up 4.0 million bales, a significant gain, but not enough overcome a tight supply situation.

—Consumption is likely to fall 1 million bales below last season's high of 63.0 million.

—World trade may decline 750,000 bales, reflecting reduced exportable supplies and a drawdown in cotton stocks.

—Prices of cotton have been at relatively high levels.

Prospects in the United States—

U.S. carryover stocks next August 1 probably will be down, perhaps to slightly more than 3.0 million bales, as a result of reduced supplies in relation to total offtake. This carryover would be 46 percent below the 5.7 million bales on hand just 2 years earlier, and would be close to the smallest since the Korean War. Despite a 2.0-million-bale increase in the crop, the supply of 14.3 million bales in 1976/77 is only slightly above last season's 14.1 million.

A larger U.S. 1977 crop could materialize, if cotton price remain strong, especially in relation to soybeans, grain sorghum, and other competing crops. Trade estimates have placed the 1977 U.S. cotton planted area at about 4.9-5.3 million hectares, up from 4.7 million in 1976.

On the demand side, U.S. mill consumption may drop to around 6.5-7 million bales this season. Bearing on this will be smaller cotton supplies, textile imports, the general economy, and larger manmade fiber use. However, with an expected increase in cotton supplies next fall and the possibility of some increase in manmade fiber prices, cotton use culd pick up later in 1977.

Iranian Poultry Imports Rise As Demand Exceeds Supply

IRAN'S poultry industry, although expanding at an annual rate of 15-20 percent, is failing to keep pace with increased consumption, which is growing at about twice the rate of production. Because of this gap, Iranian self-sufficiency in poultry and eggs now appears farther away than it did a year ago, according to U.S. Agricultural Attaché Paul Ferree in Tehran.

Consequently imports are rising, zooming from zero in 1972/73 to an expected 55,000 metric tons of poultry meat for 1976/77 and an estimated 33,000 tons of eggs. The United States recently sold frozen chickens to Iran and is expected to participate in major poultry sales to Iran in coming years.

Poultry, enjoying the fastest growth rate and ranking as the most technically advanced of all agricultural sectors in Iran, is likely to continue its significant expansion with prices being tightly controlled and highly subsidized by the Government, Ferree reports.

The market is also expanding for feedgrains, supplements and feed additives, veterinary products, poultry equipment, hatching eggs, and breeding stock.

Production of both poultry meat and eggs increased at least 15 percent in 1975/76 and the expansion during 1976/77 is likely to be much faster, according to Ferree.

Following recent trends, consumption will increase even faster than production—with imports bridging the gap. In 1972/73, Iranian consumption of poultry meat and eggs exactly equaled their production levels of 71,000 and 73,000 tons, respectively.

Estimates for the year beginning March 21, 1976, and ending March 20, 1977, project that 135,000 tons of poultry meat will be produced while consumption may soar to 190,000 tons. Thus, imports could climb to 55,000 tons from 20,000 in 1975/76, continuing the sharp trade growth since 1972/73. Iran's poultry meat imports rose from zero that year to 3,000 tons in 1973/74, to 8,000 tons in 1974/75, and then to 20,000 tons last year.

The Netherlands and West Germany were believed to be the major suppliers of the estimated 20,000 tons of chicken imports in 1975/76. These two countries will probably be the main suppliers in 1976/77, although some imports will come from Eastern Europe and significant amounts of frozen chickens were recently contracted from the United States.

Egg production is expected to reach 130,000 tons in 1976/77—a 20,000-ton increase. Consumption is expected to total 160,000 tons. The difference will be imported, representing a doubling of the previous year's imports.

Principal sources of imported eggs most likely will be Romania, Bulgaria, and Israel.

Iran continues to import about 1 million hatching eggs per month from Israel, Hungary, and Western Europe. Day-old chicks for breeding flocks are imported from Israel, West Germany, the Netherlands, and Eastern Europe, as well as from the United States.

Recently it has become difficult to get hatching eggs from traditional suppliers and some hatcheries are seeking larger quantities from the United States while hoping that the Government may subsidize air transport cost, Ferree said.

The opening of Iran's poultry and egg imports to supermarkets has led to a great deal of interest among private traders. But, in reality, only a few supermarkets, cooperative purchasing agencies, and large company commissaries are eligible to import, as Government agencies handle the bulk of poultry imports.

During the 5 years between 1972/73 and 1976/77, per capita consumption of poultry meat has risen from 2.25 kilograms to an estimated 5.5 kilograms, still low when compared with that in the United States and many other countries. However, within the last year consumption has risen by 40 percent.

During the same period, per capita consumption of eggs has risen from 2.3 kilograms to 4.6.

The sharp increase in poultry consumption is based primarily on the growing Government imports that help satisfy demand by putting subsidized products within reach of many more customers, Ferree reports.

Prices of chicken and eggs are strictly controlled at all levels of trade.

Prices paid for poultry feed, grains, and oilseed meal are also controlled and to some extent subsidized. Similarly, the price of baby chicks is fixed by the Government.

The last poultry price increases occurred in August 1976, but they were minimal with the cost of baby chicks, both broilers and layer pullets, remaining the same. For example, the price of dressed chicken, local retail, rose from 115 rials to 120 (about 75.50 rials = U.S.$1) per kilogram. Dressed chicken, imported retail, went from 105 to 120 rials per kilogram. Producer eggs rose from 62 to 71 rials per kilogram, while retail eggs, local and imported, increased from 69 to 76 rials per kilogram.

Government policy, consequently, is very much a determinant of the speed of expansion in Iran's poultry industry.

Although producers are dependent on feed produced from subsidized grain and soybean meal, as well as on remunerative prices set for poultry and eggs, they feel that Government poultry imports and subsequent sale at subsidized prices to consumers are counterproductive to their interests.

OECD Views On World Food Trends and Problems

INCREASING food problems in many developing countries and uncertainty over the agricultural policies of several Communist countries, most notably the USSR, are likely to be dominant forces in the world food situation during the next 10 to 15 years, according to a recent study published in Paris by the Organization for Economic Co-Operation and Development (OECD). However, the potential for still further expansion of production in the industrialized nations will help to counterbalance these trends.

The analysis, "Study of Trends in World Supply and Demand of Major Agricultural Commodities," was undertaken in 1974 at the request of member countries of OECD.[1] It is mainly concerned with probable trends in leading

This poultry house is one of 36 going up near Isfahan. Iran.

Some 860 significant poultry operations were reported recently in the region around Tehran, and many large operations are developing in other towns.

Several multi-million-bird broiler units should be completed by 1977, along with two 500,000-hen layer operations plus other substantial layer units. Two U.S. companies are now involved in poultry developments in Iran, and several U.S. and other breeding franchises are active in sales or joint-venture hatching, according to Ferree.

No data exist on other poultry production, but the villages are believed to account for about 100,000 turkeys and 200,000 ducks and geese.

The Government turkey operation is expected to produce 12,000 birds in 1976/77. The director of the operation is interested in obtaining technical assistance from the United States.

Despite all the pluses—increased production and imports, subsidized prices, and favorable Government policy—Iran's self-sufficiency in poultry and eggs is losing the race to galloping increases in consumption.

Producers reportedly would prefer that some of the subsidy—going toward imports in order to keep consumer prices low—be used to increase local producer prices, thus providing more incentive for expansion.

However, the rate of expansion will continue as long as the poultry industry remains profitable. With increasing growth in demand, there is no reason to believe the Government will not continue to provide profitable producer prices as well as continuing to subsidize feeds and vaccines, and to supply easy financing for expanding production. Shortages of cement and building materials are probably the biggest deterrents to poultry expansion, Ferree said.

At present, poultry breeding stocks in existence will produce an estimated 100 million birds per year—a figure that is expected to double by 1977/78.

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producer, consumer, and trading countries because of the international impact of these trends—especially in OECD countries.

A key aspect of the study is that it was undertaken on the assumption of a continuation of existing government policies. The report stresses that a radical improvement of the food situation of many developing countries would call for a fundamental change in their policies as well as those of OECD countries.

In coming years, the report said, there appear to be no overriding obstacles to the production potential of industrialized countries. However, mobilization of this potential depends on adequate economic returns. The close links binding agriculture to suppliers of its inputs and users of its products are likely to strengthen, thus making agriculture in the advanced nations still more sensitive to the general economic situation.

For many countries, particularly the least developed and the most densely populated ones, food prospects are alarming, according to the report. These countries face a difficult choice:

- Produce as much and as fast as possible, concentrating on the most modern sectors of agriculture, to meet the demands of the growing urban population while risking neglect of the mass of the rural population, or
- Try to raise productivity in subsistence agriculture to satisfy the great mass of the rural population. The food needs of the urban centers would then have to be met by mounting imports. Yet slender foreign exchange resources are insufficient to cover both the urban food needs and capital investment requirements.

Whether or not this dilemma might be solved by some type of balanced strategy, the goal should be to insure that increases in agricultural production exceed population increases. For the poorest countries, a high level of food aid will remain essential, even if it is of uncertain value for economic development, the report concluded.

The wide fluctuations recently witnessed in world agricultural production and trade could worsen, the study said. But this instability may also be countered through increased stockpiling, more reliable information, sale and purchase contracts covering several years, or other arrangements providing medium-term guarantees for importing and exporting countries.

The study also notes that a change in production, consumption or trade policies in important countries could considerably alter international agricultural markets. However, the study was based on the assumption of existing policies.

One major handicap to achieving this stability is the uncertainty surrounding requirements of the USSR and Eastern Europe. The recent 1975-80 agreement, committing the USSR to import a minimum total of 6 million metric tons of U.S. wheat and corn per year, introduces a certain element of stability. But,

Continued on page 12

[1] **Members of OECD are the United States, United Kingdom, Australia, New Zealand, Austria, Belgium, Canada, Denmark, Finland, France, West Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and Turkey.**

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FELDA's Role in Palm Boom

Continued from page 4

major responsibility for production on their assigned plots. Settlers receive subsistence credits while trees are young and nonbearing. During these initial establishment years, settlers pay particular attention to weeding, fertilizing, and pest and disease control.

Repayment. In the case of oil palm plots, 2 years after entering the scheme —roughly the time that oil palms begin to bear fruit—settlers start "loan" payment (per-family allocation of FELDA's investment in a house, land settlement, and infrastructure). FELDA also furnishes two additional types of credit at this time—a replanting credit account to support the settler during replanting of his plot and an income stabilization plan to guarantee a monthly income should palm oil prices drop or production slack off.

During this period, settlers also begin harvesting fruit bunches, which are purchased and processed by palm oil mills operated by FELDA. Settlers are credited with sales at prices determined by FELDA. The price is recalculated each month to reflect variations in world palm oil prices.

FELDA also maintains a marketing service—FELMA—to sell the palm oil. This marketing service is part of the Malaysian Palm Oil Producers Association (MPOPA), accounting for 85 percent of Malaysia's palm oil exports. FELDA palm oil sold in export markets is stored in bulking facilities owned and operated by FELDA and is exported under MPOPA contract arrangements with major shipping companies. Revenue from sales of FELDA oil is expected to reach US$90 million in 1976.

Ownership. Approximately 15 years after beginning the repayment stage, settlers on oil palm schemes obtain share in ownership of the cooperative on which they live and work. At this point, FELDA management draws settlers more closely into scheme administration through agricultural technology services, processing and marketing advisory work, and membership on management boards.

Social objectives also rank high among FELDA's goals. The Malaysian Government seeks to promote healthy and expanding economic production on the schemes by providing economic incentive to remain on the land, rather than abandon it and migrate to urban areas.

OECD Views on World Food Trends

Continued from page 11

the secrecy surrounding stock levels and crop forecasts in some countries, especially the Soviet Union, may well remain a major factor in the unpredictability of the world market.

Because of the profound effect that erratic Soviet purchases have had on the world market in recent years, the report devotes much space to the USSR; to the market potential of the People's Republic of China, which may remain largely autarkic; and to Brazil, where the spectacular development of products such as soybeans has already had a large impact on international trade.

The report sees agricultural trade over the next 10-15 years hinging on the rate of production increases in OECD countries, which in many cases will exceed domestic consumption; the degree of success achieved by agro-food policies in other large countries; and the extent that developing countries succeed in meeting a growing proportion of their needs through their own production.

The report also takes an indepth look at North America, which often supplies about half of the annual trade in grain and oilseeds. The region's recent record highs in the production and export of these commodities could be equaled or exceeded in the near future provided that favorable world market demands and attractive domestic markets continue. However, the study pointed out that the world market for oilseeds is becoming more competitive, and the North American share has declined.

While noting that there are possibilities for expansion of the North American livestock industry, the study said that the realization of this potential would require greater effort and coordination than expansion in the crop sector. North America also is expected to remain a significant importer of red meats, specialty pork products, and sheepmeats.

The 349-page report on supply and demand trends is available from OECD sales agents in many countries. For more information, write to: Director of Information, OECD, 2, rue André-Pascal, 75775 PARIS CEDEX 16, France.

*U.S. GOVERNMENT PRINTING OFFICE: 1977 241-410/17 1-3